



American Association of School Administrators



Before the Federal Communications Commission
Washington DC 20554
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In the Matter of) GN Docket Nos. 09-47, 09-51, 09-137
) CC Docket No. 02-6
Broadband Needs in Education, Including) WC Docket No. 05-195
Changes to E-rate Program to Improve)
Broadband Deployment)
NPB Public Notice #15)
)
Notice of Inquiry)

**Comments of the American Association of School Administrators and
the Association of Educational Service Agencies**

Introduction

On behalf of the *American Association of School Administrators*, representing more than 13,000 public school superintendents and local educational leaders and the *Association of Educational Service Agencies*, representing 553 collaborative education service agencies in 45 states, we would like to applaud the FCC for the leadership role they have taken to oversee the deployment of higher level connectivity across the country. AASA and AESA would like to offer our comments on the National Broadband Plan, especially as it relates to E-Rate.

We also recognize that schools and service agencies across the country are limited in their ability to access broadband based on whether or not telecommunications companies have built out infrastructure to their areas. In many cases, broadband is still a dream, and where it exists it may be at a very high cost due to lack of competition. We urge the FCC to use the opportunity of the National Broadband Plan and the grants under the American Recovery and Reinvestment Act to foster the buildout of broadband capacity so schools across the country will benefit.

Separately, AASA and AESA would like to express our opposition to the broadband definition propounded in the recent first-round Notice of Funds Availability by the National Telecommunications and Information Administration to implement the Broadband Technologies Opportunities Program. We object to the fact that NTIA adopts a single definition

of broadband (768 kbps download), which is simply inadequate for multiple-user environments such as schools and libraries. That level of speed cannot support the bandwidth-intensive educational content and services that schools and libraries use or aspire to use. We urge the FCC to recognize the multitude of uses of broadband capacity in schools and therefore develop an appropriate definition. Without an appropriate definition to use for schools and libraries, it is hard to answer many of the questions posed during this comment.

Broadband Deployment

AASA and AESA still see buildout and cost as major barriers impacting broadband deployment. One of the limitations on broadband deployment is availability especially in rural areas. Fiber is typically required in schools seeking network speeds over 3 to 6 MB that can no longer be delivered via a T1 line. In our experience the cost difference between 10 MB to 100 MB pales in comparison to jumping from 6 MB to 10 MB because of the corresponding technology infrastructure required by the provider. In sparsely populated areas, technologies such as wireless, fiber, etc. require a significant investment with little return by service providers as the school district is typically the largest -- or in some cases, the only -- consumer of the bandwidth.

From the cost side, E-Rate has its limitations on how much it can help. E-Rate is a critical telecommunications program with educational benefits. E-Rate funds connectivity not end-user equipment and the current fund cap limits the program's ability to simply fund needed connectivity. E-Rate is a discount program helping to subsidize the core infrastructure. There are many other components, such as laptops, training, applications, etc. that are not funded through E-Rate. The Department of Education has a critical program under the Elementary and Secondary Education Act, known as Enhancing Education through Technology, is designed to fund computers and teacher professional development needs. It is important to maintain this important separate but complementary program.

Adequate bandwidth remains a huge concern, especially for rural school districts that have to seek out service providers to buildout services to their schools. In many instances, it requires multiple service providers providing various levels of service and technology -- at different pricing structures to link rural schools up. This requires extra management and coordination of technical support at the district level and typically results in some district buildings receiving less bandwidth than others, determined not by their needs but simply by their physical location. In addition, hooking up the school to broadband does not mean the connectivity carries all the way to the classroom. That last element of connectivity is important but sometimes the most costly.

Broadband Implementation

In the 45 states with Educational Service Agencies, most - if not all - play some role in coordinating the deployment of broadband networks to school districts. That role may be an aggregation point for commodity Internet or Internet2, or as aggregators coordinating the procurement of broadband on behalf of their regional school districts. ESAs are uniquely equipped to provide this service most efficiently because of their regional relationship with schools, and their capacity to provide technical, administrative and professional development services. Many times it is these same ESAs who are able to provide the local technical assistance to local school districts to apply for E-Rate discounts.

Broadband and Digital Content

While access to the internet at high speeds is critical, access cannot be successful without discussing the quality of the content. AASA and AESA firmly believe it is not the role of FCC to dictate or define quality content. States and the U.S. Department of Education need to work together to provide best practices. The FCC should reinforce the need to keep children safe from on-line predators, cyber-bullying, and inappropriate content as it does currently. Just as it does not determine what programming a broadcaster sends out over the airwaves, the FCC does not have the background or capacity to dictate the educational quality of content. These items are best addressed by states and educational policy leaders to reflect emerging educational needs and individual school district progress.

Digital Literacy

AASA and AESA believe that digital literacy is not at the level it should be in the education field. This is most likely due to a combination of limited funding and lack of technology expertise in the field. School districts have limited ability to hire the technology gurus that businesses are often hiring to increase digital literacy. Many of those experts are cost-prohibitive for school districts. Within the E2T2 program, there is requirement for technological literacy for all students by 8th grade. School districts and states are still working to understand the full breadth of use of technology for educational purposes.

Online Learning Systems

At this point, many school districts are educating their students through blended delivery models. These models range from traditional teacher in front of classroom to full-on integration of technology in the classroom that blends all boundaries. Unfortunately, some of the barriers related to full integration of technology in the classroom are impacted by connectivity and availability of resources. AASA and AESA urge the FCC to look at the cutting edge work of Alan November (<http://novemberlearning.com/team/alan-november/>). He

represents the height of integration of technology to engage students in learning and has been able to create some great educational models.

Accountability and Reporting Systems

There is currently a large push at the U.S. Department of Education to increase the use of longitudinal data systems at the state level. They have provided \$250 million in grants to states this year to develop these systems. In addition, they have increased the data collecting requirements at state and local levels, making it even more likely that the huge data transfers common under Adequate Yearly Progress are going to get even more complex. It is still too early in this process to know what the capacity needs will be at the local level. Once the states develop their data systems, the local districts and service agencies will have to bring their own data systems into compatibility. That is when we will have a better sense of system needs.

E-Rate Modifications

It is hard to know exactly how much of E-Rate discounts are currently going to increasing access to broadband services. Though this information is collected as part of the E-Rate application process, it is not broken down or captured for these purposes. Disaggregating this information even further creates larger concerns. USAC only knows free and reduced lunch count for applicants but not numbers of students. They would only know rural or urban due to the additional discount bump they receive. Finally, this all depends on the definition of broadband and what schools include. E-Rate may have an indirect role in subsidizing broadband because it may be what is available for school district connectivity. In rural areas, many times it is the school alone that can access broadband due to cost and accessibility. AASA and AESA urge the FCC to work with USAC to review the current application for E-Rate and see what additional information could be captured out of what is already being submitted.

While bandwidth should be the driver as local school districts develop their technology plans, the final plan must be based on local availability and school district need. Schools should be able to know how the bandwidth will be used in order to figure out how much they will need. Video and audio usage requires a larger bandwidth to prevent the system from getting bogged down. America's Digital Schools, in a 2008 internet bandwidth report, stated that by 2011 schools would need connectivity equaling 40 kilobits per student. It is almost formula driven based on how it will be used and number of users. A report from the State Education Technology Directors Association in 2007 - called for 10 megabits per 1,000 students and staff and predicted over the next 5 to 7 years it would be 100 megabits for every 1,000 students and staff. As the uses of technology increase, so will the demand for bandwidth.

Currently, E-Rate is constrained by the \$2.25 billion cap on the fund. With demand for E-Rate through applications equaling approximately \$4 billion a year, the current size of the fund does not meet the current demand for the program. If community use is expanded, AASA and AESA believe it must remain within the confines of the school and afterschool hours. We support afterschool access to these connections provided everything is still run through district filtering software. Schools today are blurring the boundaries of learning time, including the expansive use of virtual schools. Students should be able to access the school's network in order to do homework and increase out-of-school time learning. If the bandwidth is idle then the community should have access during afterschool hours. If it is being used during school hours it would require an expansion of bandwidth.

AASA and AESA strongly oppose expansion of E-Rate to new applicants. Head start and preschool are currently eligible per state definition. Dual enrollment classes ensure that higher education already has access when offered on K-12 campuses. Given the current demand outweighing available discounts, we cannot support the expansion of the base of eligible entities. If the cap was lifted, it would have to meet the current demand before being used for new categories of applicants. Once the current demand for the program is met, the FCC could look toward expansion on a step-by-step basis.

E-Rate is a telecommunications program with educational benefits. There are current programs at the U.S. Department of Education that focus on professional development and end-user equipment, including EETT. E-Rate should not be used to replace those efforts and therefore should focus solely on connectivity to complement the activities under EETT. AASA and AESA recognize the overall need for the funding of technology and the importance of the federal investment in EETT at a sufficient level so that the program can operate as a formula grant program, as was originally intended. This will ensure that all school districts have access to this important funding stream. If there is enough money to meet current E-Rate demand (a threshold), then it would be worthwhile to fund some of the additional costs that go along with connectivity (see below). E-Rate must be used to expand bandwidth nationwide, first and foremost. As a nation, we are so far from that level of penetration that meeting that goal and having available funding for computers and training is unlikely to happen.

As almost every ESA in the nation has a Wide Area Network to link schools, modification to the WAN regulations would most likely result in greater broadband deployment. It should be noted current regulations do partially support WANS; however, support for wide area networks beyond current limitations would allow greater flexibility within school district boundaries and between school districts, ESAs and state operated networks for additional/updated buildouts that could provide greater bandwidths for rural, suburban and

urban communities. Partnerships could be established between multiple entities that have a common interest and need for less costly broadband deployment allowing greater access and equality. Additional costs incurred for the expansion of the regulations must not fall within the current E-rate funds.

AASA and AESA remain concerned about the steps that the FCC and other federal agencies are taking to insure buildout of broadband nationwide, especially to anchor institutions such as schools. That should be the focus of the federal efforts.

In addition, AASA and AESA filed back in 2005 on the FCC's efforts to streamline the E-Rate application process by recognizing the difference between applications for priority one services versus priority two. We had supported the FCC's initial conclusion that there be a multi-year streamlined process for priority one services. This should be implemented through three-year applications for recurring services. An applicant would only need to file their Forms 470 and 471 once and the application for priority one services would be good for three years. This would both streamline the process, and encourage applicants to pursue multi-year contracts generating more savings over single-year or month-to-month contracts. We are disappointed that this seemingly simple change has not been done in the last four years.

Schools who are not participating often do not apply for the E-Rate program because the overall process is seen as bureaucratic and complicated. This is even truer for the smallest applicants. Many times, the staff in small schools are responsible for so many different jobs and responsibilities that adding on the complication of the E-Rate process can be seen as more trouble than it is worth. School districts are used to the application process and language used by the U.S. Department of Education. Shifting to the language of the FCC is often difficult for them to understand. Therefore, AASA and AESA support the introduction of an E-Z form for priority one services. This form, similar to ones used by the IRS for tax purposes, would allow the individual applicant to simply enter the necessary data for these specific recurring services. Having easier access to priority one services would make applying more appealing for the smallest schools.

We would also support the use of a complete online application process. Applicants could establish PIN numbers that would allow them not only to file their applications online, but to also monitor their process through the system. This would add more information and certainty into the process. It could also be used to remind applicants of upcoming deadlines. This change in the application process would help reduce any ministerial error caused by an applicant who missed a deadline.

We also urge Congress and the FCC to provide a permanent exemption of the Universal Service Fund from the Anti-deficiency Act. The FCC has noted in the past the impact of delays in the application process on schools. Such delays make future planning that much more difficult. For instance, when the Anti-Deficiency Act was imposed on E-Rate, it delayed the distribution of commitment letters for over five months. This made it nearly impossible for school districts to plan for the next year's application when they were not even informed as of yet of their discounts for this year.

AASA and AESA calls on the FCC to address the outstanding issue of dark fiber. We strongly support that schools and service agencies should have a way to access the dark fiber that is out there and currently not being used. For instance, some schools in Colorado were trying to access some dark fiber that was laid by the Department of Transportation. Unfortunately, though currently unused, a telecommunications company stepped in and required the schools to pay market value for their use. This pay agreement may it cost prohibitive for the schools. These regulations defy logic. If the fiber is there, why shouldn't public schools be able to access it? This would help leverage for the "last mile" buildout.

E-Rate Disbursement

AASA and AESA oppose the creation of a new priority level for deployment of broadband services within the E-Rate program. A new priority level would increase competition, unfairly discriminate against schools in communities without broadband access and put more well-off schools with access to broadband ahead of poorer schools. What if a community does not have broadband available? This policy would only let the strong get stronger while pushing back the needier areas.

Additionally, the discount levels, especially in priority one should not be adjusted. These levels are based on poverty and therefore are based on an ability to pay. Especially in the current economic situation, schools in need should not be forced to pay more for these recurring telecommunications services. We would be willing to discuss the local match for districts applying under priority two services. Given the limitations on funding within E-Rate due to the current \$2.25 billion cap, it is rare that school districts below the 80 percent threshold receive priority two discounts. Therefore not everyone applies because they assume there will not be enough funding available.

Several years ago, the FCC introduced the two-in-five rule limiting how many times a district can come back for priority two services within a five year window. Due to the overall lack of funding in priority two it is difficult to see if this rule actually has an impact. We would be willing to address ways to prevent the same 90 percent discount schools from continually going

for priority two discounts at the expense of other poor districts. With just a ten percent match, it is easier for schools to just include in their technology plan and applications without much thought. There is very little community buy in at that point. It is possible for the FCC to keep the current discount rating for priority two services but require a greater buy in from the 90 percent discount applicants. We believe that this might help them think about why they are doing what they are doing and what they are asking for. Given the current fiscal climate, this situation requires a lot more study before a decision is made. Raising the overall cap would help address this increasing demand on priority two discounts.

There is local innovation on broadband deployment and E-Rate currently helping those efforts succeed. Any additional federal efforts in broadband should supplement, not supplant, these state and local efforts.

Demand already exceeds available funding under E-Rate by almost two to one. If a new national broadband goal is created it may increase demand on the current E-Rate program to a level that could not be sustained without a dramatic increase in the cap. If the purpose of E-Rate is expanded or redirected for new purposes, demand will only increase. Only if the FCC supplied ample funding to match the increased demand could schools work to meet the goal. In addition, the FCC would need to apply pressure to the telecommunications providers to ensure that they are building out into all communities.

E-Rate Funding

AASA and AESA believe that the time has come for the Commission to increase the program's annual cap to meet the current demands on E-Rate. The E-rate cap has not been raised from the program's \$2.25 billion spending cap since 1997, nor has it been adjusted in response to inflation. We applaud the sentiments expressed by Chairman Rockefeller, in a letter addressed to Chairman Genachowski, in which he observed that the program's cap had not kept pace with inflationary pressures over the past ten years and requested that the Commission "expeditiously adjust commission rules to address the toll that inflation has taken on this important program." We urge the FCC to seriously consider increasing the cap on this program to bring it in line with the new demands on the fund that could not have been imagined when E-Rate was created. In addition, we cheer the FCC's suggestion to tie additional funding through inflationary increases.

For the current funding year close to \$2 billion (\$1.819 billion) of the \$2.25 billion restricted fund is currently used up by priority one services. If it wasn't for the roll over funds, it is unlikely that priority two funding would go below the 90 percent discount. This is something that needs to be fixed in the underlying E-Rate program before we consider any expansions. It

is expected that if no changes are made in the next couple of years, it is likely that E-Rate will only have enough monies to fund priority one services.

Prior to the proposed expansion of E-Rate, AASA and AESA have supported the raising of the funding cap to at least equal the \$4 billion in demand every year. We realize this is a false reading of true demand in E-Rate because it is rare to get below the 80 percent discount level in priority two. Therefore many applicants who fall below the 80 percent level do not apply. AASA and AESA strongly support the lifting of the cap to meet current demand before program expansion is considered.

Once again, AASA and AESA would oppose a modification of the discounts in priority one services. Those are fixed telecommunication costs at the local level and especially in this economic downturn. As demand for priority one increases, there is less money available for priority two meaning that even fewer applicants will be funded.

The current eligible services list has been pretty encompassing so far and is kept current through yearly updates. AASA and AESA once again would argue that dark fiber should be on the eligible services list, better enabling districts and service agencies to leverage existing resources.

Increased bandwidth will undoubtedly result in increased costs in school districts and service agencies. There will be infrastructure needs at the local level including electric, wiring, etc.... Viruses, Spyware and Spam are synonymous with additional broadband. Just as the cost of content-filtering continues to rise, so will demand and cost for these additional applications and services. Below is an example of these additional costs:

- Anti-Virus Licensing - \$10 to \$12 per computer per year
- Anti-Spyware Licensing - \$5 to \$10 per computer per year
- Anti-Spam Licensing - \$3 to \$5 per computer per year
- Content Filtering - \$10 to \$20 per computer per year

For a school district with 2000 computers these costs add up to an additional \$60K per year. Many of the companies offering these products bundle them into a single network appliance or server application that includes bandwidth management and firewall protection and intrusion detection. Making these products/services eligible under E-Rate would help to spur competition among companies to lower costs and would benefit applicants across the entire spectrum of discount levels. However, this could only happen if the cap was raised and the current demands of the program were met. In the meantime these are costs that will have to be absorbed at the local level.

EETT is a critical partner for the E-rate within the Department of Education. From the public schools perspective it is the genesis of the technology plan and the basis for training and professional development funding. Local school districts and service agencies have raised concerns over the decreasing emphasis and funding cuts to EETT, especially in the FY 2010 budget and appropriations bills before Congress. Reductions in EETT funding worry educators that the federal level is reducing its focus on educational technology. E-Rate cannot and should not take the place of that program. It is easier for local districts to sell the cost and need for computers to their communities than to convince them of the higher costs of bandwidth availability. That needs to be covered under E-Rate.

We are supportive of coordination to ensure broadband deployment but E-Rate should supplement not supplant state and local efforts in these areas. There are currently strong local efforts working toward broadband deployment. E-Rate is currently playing a role in broadband development in that within many rural communities, the school district is the largest subscriber for broadband. Service providers building infrastructure to school districts typically offer increased services to the community. However in sparsely populated areas where the ROI is difficult for service providers, the implementation and installation costs are typically passed on to the school district, which must make a decision whether to lease these services on a long-term basis or build-out their own private network. This presents complications for using E-Rate as a way to help cover broadband costs. Rural schools cannot simply post a Form 470, seek pricing for a service, and then apply for discounts within a 3 month window.

ESAs play a key role in helping to aggregate demand among all schools in a region, allowing service providers to spread out their ROI of implementation between populated and very rural locations but there is a substantial amount of preparation, lead time and staff resources required. While the recent ARRA stimulus funding provides low interest loans to encourage service providers to build infrastructure in under-served areas, the timing of those funds does not correlate with E-Rate, so a rural school seeking broadband could benefit only if the service provider was aware of the district's intent, applied for the NTIA funding to off-set construction costs, and the district's E-Rate discount was approved at the same time. Because of the amount of coordination required, if funding were available through NTIA for ESAs to assist in the planning and coordination of rural broadband service to schools a more coordinated effort would result leveraging all of these various programs. More importantly, it would expand broadband into schools (and under-served areas) at an affordable and sustainable cost and maximizing the federal government's investment in these programs.

Conclusion

Overall, we are supportive of the government's efforts to increase access to broadband across the country. AASA and AESA urge the FCC to consider the current demands on the E-Rate before considering any change in the scope of the program. The E-Rate has not seen many positive developments in its administration in quite some time. It is important to get the underlying program operating more efficiently with a streamlined application process and an increased funding cap to meet the growing demand for technology in the classroom.